

1995, and is reduced to 3.0 percent for VMT comparisons made in 1996 and thereafter. However, since each revised VMT forecast becomes the VMT baseline for triggering contingency measures, the application of a margin of error every year could allow the forecasts to increase without bound, without ever triggering contingencies. To prevent this occurrence, EPA believes it is appropriate to allow the application of the margin of error only as long as, cumulatively, neither an estimate of actual VMT nor a VMT forecast ever exceed by more than 5.0 percent the VMT forecast relied upon in the area's attainment demonstration.

In practice, then, there are two ways in which an estimate of actual VMT or an updated forecast can be found to exceed a prior forecast. Individual yearly comparisons can result in an exceedance of the forecast made 12 months earlier by more than the prescribed percentage for that year, and exceedances can accumulate so that, cumulatively, they exceed the 5.0 percent cap above the attainment demonstration forecast.

EPA interprets the requirement for contingency measures to "take effect without further action by the State or the Administrator" to mean that no further rulemaking activities by the State or EPA would be needed to implement the measures. The *General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990*, published in the **Federal Register** on April 16, 1992, offers guidance on the type and size of contingencies to be included in the SIP revision. This guidance is advisory in nature and is non-binding. (See 57 FR at 13532-33, April 16, 1992.)

The State of Alaska has submitted a SIP revision to EPA in order to satisfy the requirements of sections 187(a)(2)(A) and 187(a)(3). The State submittal provides for each of the following mandatory elements: (1) a

forecast of VMT in the non-attainment area for each year prior to the attainment year; (2) a provision for annual updates of the forecasts along with a provision for annual reports describing the extent to which the forecasts proved to be accurate; these reports shall provide estimates of actual VMT in each year for which a forecast was required; (3) adopted and enforceable contingency measures to be implemented without further action by the State or the Administrator if actual annual VMT or an updated forecast exceeds the most recent prior forecast or if the area fails to attain the CO NAAQS by the attainment date.

II. Analysis

The following items are the basis for approval of the SIP revision. The State has met the requirements of sections 187(a)(2)(A) and 187(a)(3) by submitting a SIP revision that implements all required elements.

1. VMT Forecasts

Section 187(a)(2)(A) requires that the State include in its SIP submittal a forecast of VMT in the non-attainment area for each year before the year in which the SIP projects the National Ambient Air Quality Standard for CO to be attained. The forecasts are to be based on guidance developed by EPA in consultation with DOT, i.e., the *Section 187 VMT Forecasting and Tracking Guidance*. To accurately forecast VMT in the Anchorage area, The Municipality of Anchorage and the State Departments of Environmental Conservation and Transportation and Public Facilities used the HPMS. The Central Region portion of the Alaska HPMS database was expanded to contain most of the eligible roads in the Anchorage area, and the HPMS sampling methodology was applied to increase the accuracy of traffic estimates. This procedure resulted in an increase in the number of roads included in the database, and an

increase in the number of sample sections on the roads. HPMS provides VMT estimates based on actual traffic counts collected from a representative set of sampling locations. The network-based travel demand modelling process described in *Section 187 VMT Tracking and Forecasting Guidance* was used to project future VMT for calendar years 1993, 1994 and 1995. The MinUPT travel demand model estimated growth in vehicle travel during the forecast period. This model is maintained by the Municipality of Anchorage Department of Economic Development and Planning. Demographic data (population, land use, and employment data) was used as inputs to the model. MinUTP model runs were performed for the base year 1990 and for future year 1995. Runs incorporated a population growth rate of roughly 1.2 percent per year. As a result of the modeling runs, VMT were projected to increase by 13.3 percent over the five-year period, or roughly 2.5 percent per year. VMT during intervening years was estimated from straight-line interpolation. Documentation on the model is contained in the *1985 Anchorage Metropolitan Area Transportation Model Report*. This annual VMT growth rate is more than double the projected increase in population for the same period. The use of a high ratio will provide a conservative estimate of future reductions in emissions and resulting air quality concentrations. A safety margin of 5.5 percent was added to the VMT forecasts. Best estimates of future-year VMT were increased by 5.5 percent. Attainment projections were prepared with this VMT included. For the 1990 base year, model estimates reflect the existing 1990 roadway network and the best available demographic data as inputs, and no safety margin is required.

Below is a table showing the forecasted VMT for Anchorage:

AVERAGE ANNUALIZED DAILY VMT FOR ANCHORAGE

Year	Projected VMT	Safety Margin (percent)	Forecasted VMT
1990	2,854,000	-0-	2,854,000
1993	3,081,530	+5.5	3,249,800
1994	3,157,373	+5.5	3,329,800
1995	3,233,216	+5.5	3,409,700

2. Annual VMT Updates/Reports

Section 187(a)(2)(A) specifies that the SIP revision provide for annual updates of the VMT forecasts and annual reports that describe the accuracy of the forecasts and that provide estimates of

actual VMT in each year for which a forecast was required. The *Section 187 VMT Forecasting and Tracking Guidance* specifies that annual reports should be submitted to EPA by September 30 of the year following the

year for which the VMT estimate is made.

Annual VMT tracking is done by the Alaska Department of Transportation and Public Facilities using the federally mandated and annually audited HPMS.